

SOFTWARE RELEASE NOTES

for

Intermec Terminal Emulator

Version 1.10

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1. Version Information

This release of Intermec Terminal Emulator (ITE) operates on CK3, CN3 WM5, CN3 WM6.1, CK32, CV30 WM5, CV30 WinCE, CK60 WM5, CK60 WinCE and CN4 mobile computer. Intermec Terminal Emulator is the next generation of Intermec's popular terminal emulation client (previously known as TE 2000) which connects Intermec computers to host applications using 5250, 3270 and VT/ANSI emulation. ITE V1.10 is built on years of industry experience and expertise in TE 2000 and has been tested for optimal performance on the Intermec terminals in emulation environments such as warehouses. ITE supports 4 simultaneous host sessions, security, and complete data collection with Intermec scanning and RFID technologies. .

Please reference the ITE Programmer's reference manual for additional information on features and use of ITE.

Below is the minimum version of OS, SSPB and IVA that should be used with this version of ITE. The ITE application was also tested against the SmartSystem foundation version 3.50.04.1120..

Device	Operating System	Operating System Version	SSPB	IVA
CK3	Windows Mobile 6.1	3.45.26.0031	6.20.33.0471	5.04.70.2820
CK32	Windows Mobile 5.0	3.31.30.0010	5.50.34.0384	5.03.59.2350
CK60	Windows Mobile 5.0	3.31.16.0043	5.50.21.0390	5.03.59.2386
CK60	Windows CE 5.0	3.31.16.0040	5.50.32.0391	5.03.68.2387
CN3	Windows Mobile 5.0	4.00.20.0036	6.00.27.0407	5.04.40.2561
CN3	Windows Mobile 6.1	3.25.15.0141	5.50.23.0362	5.03.59.2363
CN4 CDMA	Windows Mobile 6.1	4.40.32.0010	7.00.36.0555	5.06.72.3198
CN4 UMTS	Windows Mobile 6.1	4.20.29.0031	7.00.36.0521	5.05.73.3133
CV30	Windows Mobile 5.0	3.30.14.0034	5.50.21.0361	5.03.59.2340
CV30	Windows CE 5.0	3.30.14.0038	5.50.32.0393	5.03.68.2387

2. Installation Notes

To Install ITE

You may install ITE onto your Intermec terminal listed above using one of the following methods:

SmartSystems Foundation – This method is a good option when installing ITE on multiple computers. This option requires a PC running SmartSystems Foundation. You may download a free version of SmartSystems Foundation from Intermec’s web site at:

- <http://www.intermec.com/products/smrtsysfoundation/index.aspx>

Download ITE from the Intermec downloads site to your PC after you have installed SmartSystems Foundation. ITE will appear in the SmartSystems Console. You may then use any of the supported installation methods including dragging the ITE client and dropping it onto the target computer.

For the following methods please download the ITE application from the Intermec downloads web site <http://www.intermec.com/products/ite/index.aspx>. You will have a SmartSystem bundle which you then need to extract onto your PC. After running the self extracting archive you will have the following folder created on your PC
C:\Program Files\Intermec\SmartSystem\ss_lib\software\ITE_XXX_1.10.00.0422. Where XXX is the terminal name. From this folder you need to copy the *.cab.

- SD Card Copy the *.cab files on to the SD Card. Install the SD Card into the Intermec terminal and then run the cab file.
- ActiveSync Copy the *.cab files to the root directory of the Intermec terminal. Then run the cab file.
- Avalanche create an ava package which contains the *.cab file and then deploy this package to the Intermec terminal.

Licensing

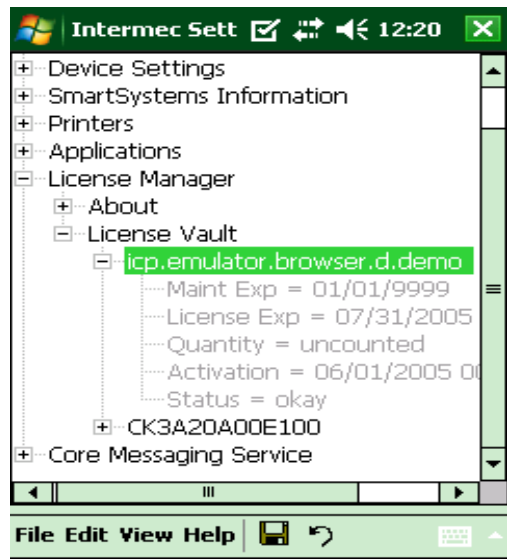
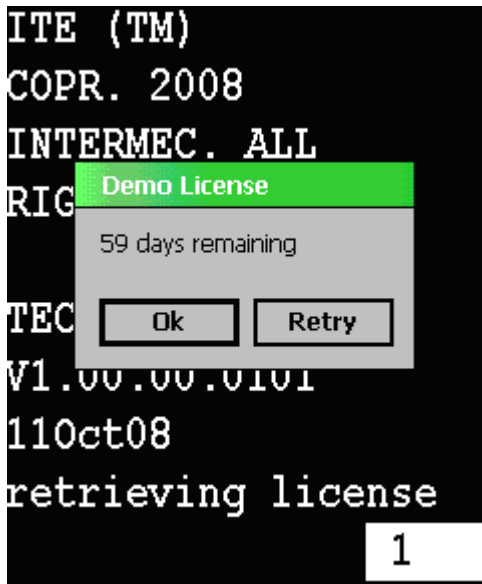
If ITE was not purchased pre-installed on your Intermec terminal, ITE will require activation to operate with full functionality beyond the evaluation period.

- If your computer was purchased with ITE preinstalled, then no activation is required.

The build date of the ITE V1.10.00.0422 application is Oct 14, 2009.

ITE will run in a Demo mode for 60 days if your device does not contain a proper factory license or activation license. Demo mode allows you to operate the device for 60 days in “full feature”. After 60 days, the device will move to nag mode.

Licenses are available for purchase through your Intermec representative.



3. New Functionality Available in Version 1.10

Image Capture

- On CN3 or CK3 terminals which have an EA11 or Camera there is a new ITE toolbar option. When you tap this toolbar button (SS) it will bring up an application which will stream the video and allow you to then capture an image. You can configure the terminal for where you want the image to be stored, the format of the image (bmp or jpg), the ftp address, port, username and password of where you want the image sent after it has been captured. .

Coexistence of ITE and selected Voice over Internet Protocol (VOIP) applications

- There is a new ITE toolbar option VOIP which when selected will place a new button (V) on the ITE toolbar. When this button is tapped it will allow the ITE application to go to the background and your VOIP application to come to the foreground. When you install your VOIP application you can define a push to talk (PTT) button and when this button is pressed then momentarily the VOIP application will come to the foreground and then when the PTT button is released the ITE application will resume as before. We provide support for HipVoice and TabletMedia VOIP applications currently.

Coexistence of ITE and Intermec Browser

- There is a new ITE toolbar option Intermec Browser which when selected will place a new button (IB) on the ITE toolbar. When this button is tapped it will allow the ITE application to go to the background and the Intermec Browser application to come to the foreground. The Intermec Browser likewise has a button which will allow it to go to the background and the ITE application to once again be the foreground application.

RPC enhancements

- When your client attaches to the ITE application and issues the registerscreencontentscallback function then the entire physical screen contents are returned to your application. Previously only those portions of the display that changed from the previous screen update were being sent to the attached client application.
- The SendKeys function added the ability to send control, alt and shift key values
- There is a new function doWebBrowser which takes a single parameter (url address of the webpage to be displayed). When this is invoked it will bring up the specified webpage.
- There is another new function closewebbrowser which will close the current webpage and set the focus back to the ITE application.

Support for UDP+ on WM6.1 terminals

- There is a SmartSystems bundle for WM6.1 devices available upon request through your Intermec Representative.

<http://www.intermec.com/support/downloads/ite/index.aspx>.

This application will change your transport layer from TCP/IP to UDP+. This application will also allow you to configure the IP address that the terminal uses to make a connection to the

SPS as well as various other communication parameters between the terminal and your Session Persistent Server (SPS).

Out of range monitor

- There is a new ITE menu option to enable/disable an out of range monitor dialog box. The default is to have the option disabled. When this option is enabled if the RSSI falls below -75db then the following dialog box will be displayed on the terminal. The Scanner will be disabled and keyboard data is prohibited.



Application level event logging

- This is a debug facility which when enabled (disabled by default) allows specific debug information to be gathered about how the ITE application is running. The debug information is saved on the terminal in a circular queue and can be retrieved from the terminal via an activesync connection using the ITCEventViewer. There is a Smartsystems bundle which can be downloaded which will change the default debug queue size to be 10K as well as enabling the ITE event filter and enabling the most common ITE debug filters (send, receive, events, keyboard).

New terminals supported

- The ITE application can now be run on a CN4 terminal.
- The ITE application can now be run on a CN3 with WM6.1 OS.

4. Features removed in Version 1.10

Speech

- There is no longer support for the speech engine. No grammar files or speech engine needed to install before installing the ITE application. If you have installed a prior version of either the TE2000 or the ITE application which had speech components required and you are no longer using the speech engine then you can remove the speech program to get optimal

performance of your device. The new ITE V1.10 application does not remove the old speech component automatically you will need to do this step yourself.

Native emulation

- The ITE application will no longer support the Native emulation. We are now only supporting the 5250, 3270 and VT/ANSI emulations.

5. Issues Fixed in this version

SSH

- If an SSH session receives the maximum number of bytes that our receive buffer is defined to be 4096 then the next byte in memory is written to which may cause mysterious issues to occur including crashing the terminal.
- If you log out of an SSH session other than session 0 then your session 0 session is also closed inadvertently.
- The saved SSH login values get erased when you change or view host settings such as Host IP, Data Stream, Port, Key Alive Timer, Key Alive Value, or RTC over TCP. These settings should persist even if not displayed, while viewing the setup.
- If you scanned in the SSH username or SSH password the ITE application generated an auto tab to go to the next field. We have now removed this and you will now need to hit the tab key to go from one field to the next or have a barcode with an embedded tab character in it.
- Pressing arrow keys while in the SSH login screen generated L for left arrow, U for up arrow, V for down arrow and Z for right arrow. Tapping in the upper right hand corner of the display should have gotten you into the ITE menus. Instead this generated an M character. Tapping in the upper left hand corner should have brought up the session switch dialog box, but instead it generated a T character.
- If you are prompted to enter an SSH username and password then access to the ITE menus was disabled.
- If you switch sessions during an active SSH session to another session which is not currently connected and then back to the original SSH session the display will not be repainted. In order to get the display back the session needs to be reset.

Display

- If you have UTF8 encoding enabled and you send down the following UTF8 encoding 0xc8 0x92 0xce 0xa3 then the Unicode characters 0x392 and 0x3a3 should have been displayed. Instead the 0x3a3 character was being displayed as a box character.
- The double byte characters get displayed as boxes at the default size of 10 rows by 20 columns after the font face changes when the screen dialog box is displayed. The characters will continue to be displayed as boxes unless the columns are reduced to 15. The font is restored to default when the session is reset or the exit password dialog box is brought up.
- On a CK3 terminal with the Japanese OS the menu font would get changed when the user toggled the SIP.
- On a CV30 the session button was only 20 pixels wide which would cut off part of the S. The default size for this button is now 40 pixels.
- Certain Kanji characters were not being displayed correctly
- The Lucida Console should have been the default font for all terminals. This font is needed to ensure that the password dialog box and special characters such as dup in 5250 emulation are displayed correctly. If you choose to restore defaults then Lucida Console would be the default font.

- If you change the display setting from lockdown to no lockdown using SmartSystems then the ITE title bar will appear until a key is pressed which causes a transaction to be sent to the host.
- The SIP toggle option is no longer displayed when you hit the M button if you restore defaults for ITE.
- If you delete your te_settings.ini file and have the ITE application recreate it by starting up the application then the SIP toggle option on the M button was displayed twice.
- After you make a valid connection to your host then approximately 30 seconds later a timer went off inside the ITE application which caused the display to get updated in advertently.
- If the ITE application receives a host session lost while we where processing the IAC negotiations then the value of -2 would get passed to the 3270 data stream which would cause it to display a garbled up screen and inhibit keyboard entry. The only way to get out of this was to reset the terminal or the ITE application.

Extended Commands

- The extended commands for #P (send), #G (receive) and #F (send/receive) did not allow the user to set baud rates of 57600 or 115200.
- The extended commands for #P (send), #G (receive) and #F (send/receive) did not allow the user to set even parity.
- The extended commands for #P (send) and #F (send/receive) did not allow the sending of data that is greater then 0x80 when using the =xx format. Instead the data was being sent as only seven bits.
- When using the #A extended command to set the RFID attributes if the value for the RFID tag type was anything other then a space then the ITE application would lock up.

SIP and Keyboards

- Hitting the Back Tab key on the ITE SIP caused the cursor to move forward like a forward tab instead of acting like a back tab which should have taken you to the previous field.
- Hitting the OK button on a CN3 or CN4 terminal while the ITE application is running in non lockdown mode allowed the user to gain access to the start menu and thus get around the lock down feature of the ITE application.
- The new line key and SIP value when pressed moved the cursor to the first position on the next line. This position may or may not have been outside of a defined field. The expected behavior was to go to the next line and place the cursor in the first unprotected position in that row or subsequent rows.
- On a CK32 terminal when you hit the New Line key nothing happened. This key was not mapped to do anything from the SIP.
- On a CK32 terminal using the Sip to send a control 5 did not send the correct value.
- The ITE applications SIP created a debug.txt file on the root of the device and as each and every key was pressed information was logged to this file.

Menus and Settings

- The Arabic code page was not selectable from the ITE menus, but it was allowed to be selected using Intermec Settings.
- When entering a value for the RFID remote IP address if you entered a value greater then 16 characters then the next character would be taken as a control A.
- When entering the RFID remote IP address if you hit the Delete key then the RFID address would no longer be displayed as you typed in a new value.

- If you go into the toolbar opts or Menu Settings when using the M button rather than from inside of the ITE menus and change any of the configuration values you were not asked to save your parameters.
- If you change the toolbar opts or menu configurations when you are in the ITE menus along with any other setting then when you exit out of the ITE menus you were prompted twice to save your parameters.
- If you chose to restore the ITE settings to their default values then the session name, RFID reader address, 3270 device name, 5250 device name, answerback string, terminal id along with the following configuration values for each host a, b and c (host name, SSH username, SSH password, server IP address and printer address) get set to a blank instead of being set to null.
- If you go into the ITE menus and view the host size screen then when you exit out of the ITE menus your connection to the host was reset.
- Missing help for many of the ITE settings when displayed on a SmartSystems console.
- The help files for LCD Params, screen rows, screen cols, RFID setup and annunciator position listed non ITE terminals (700, CK30, CK31 and CV60).
- If you setup a UDP plus address in Intermec Settings and then started up the ITE application it would not recognize the UDP+ address that you set and instead require you to re-enter this information in order to make a valid connection.

Auto login and other ITE configuration files

- If your terminal is connected to your host using the SPS with the option of RTC over TCIP enabled and the host goes down then the auto login was not getting restarted so you had to manually enter the auto login information.
- When you first power up the ITE application with an auto log in script that asks the user to enter data the screen is erased completely with only the auto log in prompt visible. If you make a connection to a host and then restart the auto login script then the host screen background was displayed along with the auto login values.
- If your auto log in script has a PromptSessionStart command in it the "Press Enter to restart autologin" message is displayed correctly the first time. On subsequent auto login restarts this message was not getting displayed.
- If you have a character translation file (*.xlt) which changes characters to be displayed on the screen and then attempt to send any of these characters to a device (printer) that is connected to the ITE application then the translation is also sent to the connected device. For example if your translation file converted ABC to XYZ then it would display X each time A is sent down, but if this data is sent over to a device connected to the ITE application it is not supposed to be converted and it should have sent an A.

Installation

- When upgrading a CV30 running TE2000 V8.28 with the WinCE OS the TE2000 shortcut was still displayed on the desktop and several *.old files were left in the directory where the TE2000 application was installed on that device.
- When upgrading from TE2000 V8.30 on a CN3 WM5 terminal there is still a TE2000 folder left on the device with four files in that folder.
- Some times when upgraded from a previous installed TE2000 or ITE you would get an error message during the SmartSystems install saying that ITERebootDecive.exe error. This would occur less than 10% of the time.
- If you hit the retry button to get a license from SmartSystem server then the ITE application requested a normal license from the server instead of a maintenance license.

Hyperlinks

- If you bring up a web page using the embedded hyperlinks feature and then close the web window all subsequent keyboard values would come into the ITE application as WM_SYSKEYDOWN messages since no window had the focus. Therefore most ITE keys would no longer be handled correctly until you tapped on the screen to put the focus back to the ITE application.
- If you close the ITE application with a web window still open then the terminal would display gwes.exe error because the handle to the web window was not getting closed.

Customer Problem Reports (CPRs)

- 090608-000036 On a CK32 terminal the left blue encircled key did not function as a return key in 3270 or VT/ANSI emulations on either the 56 or 42 key keyboards.
09090709-000063 On the numeric CK3 terminal users where able to exit out of the ITE application by hitting the green 3 key. This key was defined as VK_DONE. The ITE application was modified to make this a NULL key.
- 090709-000063 On the numeric a CK3 terminal users where able to exit out of the ITE application by hitting the green 3 key. This key was defined as VK_DONE. The ITE application was modified to make this a NULL key.
- 090720-000148 No CAPS state. If you turn on shift and CAPS then nothing is displayed. Also if you hit the CAPS key from the physical keyboard the SIP does not get updated.

6. Known Issues

SSH

- Sending a stream of data greater then 6K to the device in an SSH session while changing sessions or entering the ITE menus may cause the application to lockup (or have unexpected behavior).

Display

- When you go into the ITE menus and chose to change the display configuration from lock down to no lock down then the ITE toolbar is no longer displayed until you exit out of the ITE menus.
- Pressing the delete key does not delete the RFID remote reader address. Instead the delete key restores the address to the previous entered value. If you need to erase the RFID remote address the work around is to backspace over all of the characters instead of using the Delete key.
- If the terminal is setting at the license screen then the SmartSystem server may not be able to discover the terminal.
- Occasionally when starting the ITE application it has been seen where the SIP was not being shown and toggling the SIP with the S button would resize the screen, but failed to display the SIP. If this happens the work around is to exit the ITE application and restart it.
- On a CV30 WinCE the select font window is too small to show the names of the fonts on the buttons.

Extended Commands

- The extended commands #F and #G fail to receive data if you have the Bluetooth print device selected. Work around is to use RS232 communications to receive data.

- If you attempt to use the extended command #W to write RFID tags to a reader which is not connected to the ITE application locally then the write will not succeed. Work around is to make a local connection to write all RFID tags.

SIP and Keyboards

- On CK3, CV30, Ck32 and CK61 terminals hitting the control 1-5 keys does not send data to the host. The work around is to use the SIP to send these control values to the host.
- If you tap on the M button and then select either menu settings or toolbar opts you are then prompted to enter a password. After entering this password the SIP is lowered.
- On a CV30 terminal using the iKey keyboards the view port keys work like paging keys.
- On a CV30 terminal using the iKey keyboards the paging keys do not work at all.
- On a Cv30 terminal using the iKey keyboards the field exit key does not work.

Scanning

- The encode barcodes for Next screen, control X and Control 5 no longer work.
- When parmsbysession is enabled and you scan a computer identics 2 of 5 barcode then an = character is added to the beginning of the barcode as the barcode type character. The actual value is suppose to be a Z character and the = is suppose to be for a straight 2 of 5 barcode.
- When parmsbysession enabled EAN13 barcodes will not decode.
- The scanner fails to read data in windows dialog boxes.

Snap Shot

- If ITE is running in non lockdown mode and you start the snapshot application then functions like volume up and volume down are not useable. Once you close the snapshot application these features are once again usable.
- If you enter an image text which is greater then 20 characters then the string overwrites itself instead of wrapping the text or bringing up a new line.
- When running the snapshot application and you attempt to select the file you want to ftp up you will notice that the entire file name is not being displayed. Since the file names all start with the serial number of the device it is hard to distinguish which one is which.
- On a Japanese OS the default folder my documents\my pictures is not empty. If you then select to ftp all files these default images will be sent to your ftp site.
- On a CN4 terminal if you open up the snapshot parameters configuration tree then all of the entries will be duplicated except for the first and last entries.
- When the snapshot application is launched on a CN4 terminal with an EA11 intermittently it will generate an error.
- When the snapshot application is launched on a CN4 terminal with an EA21 the image stream is duplicated on the screen.

RPC

- Windows dialog boxes are not sent from the ITE application to the attached client.
- If an attached client severs its ties to the ITE application rather then closing its connection, then performance of the ITE application will be vastly affected (approximately five second delays for all ensuing screen updates).
- If you use SendKeys function then all data will be sent to the ITE application as uppercase characters. There is no method to send lowercase characters.

UDP+

- On WM6.1 terminals there are no configuration settings for setting up UDP+ configurations. This means that you can not enable UDP+ or any of its configuration values using SmartSystems and instead you either need to modify the registry entries of the terminal or enter the changes manually on the device using the UDP+ applet

RFID

- On a CN4 terminal there is no RFID support. If you go into the ITE menus and enable RFID then you can intermittently see the message “We’re sorry ... “error for RFIDdec.exe.

Installation

- If you are upgrading from the TE2000 version 8.28 or earlier and you attempt to upgrade to the ITE application while the TE2000 is currently running on the device the installation will appear to work correctly, but after the terminal is warm booted the ITE application will fail to launch and instead report that it has a bad or missing component. The work around for this is to exit the TE2000 application before you attempt to upgrade it to the newer ITE application.
- If you restore defaults for the ITE application then the new default values for the following parameters are different then there initial defaults. `dbg_ascii`, `dbg_ebcdic`, `dbg_events`, `dbg_hex`, `dbg_network`, `dbg_settings`, `dbg_sip`, `dbg_startup`, `enable_sip`, `image_folder` and `menu_settings`.